



US005185736A

United States Patent [19]

Tyrrell et al.

[11] Patent Number: **5,185,736**[45] Date of Patent: **Feb. 9, 1993**[54] **SYNCHRONOUS OPTICAL TRANSMISSION SYSTEM**

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[52] U.S. Cl. 370/55; 370/84; 359/136

[58] Field of Search 370/84, 4, 3, 55, 68; 455/600, 606, 607, 609, 613, 617, 618, 619

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Primary Examiner—Douglas W. Olms*Assistant Examiner*—Melvin Marcelo*Attorney, Agent, or Firm*—Ware, Fressola, Van Der Sluys & Adolphson[57] **ABSTRACT**

A synchronous optical transmission system for interfacing SONET formatted channels to lower speed channels in either a SONET format or otherwise. The transmission system incorporates a fiber transmission system, terminal multiplexers and add/drop multiplexers that in turn incorporate a plurality of features, such as parallel scrambling circuitry, frame synchronization circuitry and the like.

[21] Appl. No.: 351,861

[22] Filed: May 12, 1989

21 Claims, 43 Drawing Sheets

Microfiche Appendix Included
(36 Microfiche, 63 Pages)

[51] Int. Cl.⁵ H04J 3/00; G02F 1/00